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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,771

03/08/2005

Rikuo Onishi

HEIW:046

5849

7590

05/17/2006

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EXAMINER

WU, IVES J

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/526,771	Applicant(s) ONISHI ET AL.	
	Examiner Ives Wu	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

(1). Applicants' Remarks and Amendments filed on March 1, 2006 have been received and acknowledged.

Claims 1, 2, 4 and 8 are amended. Claims 10-21 are newly added.

The 112 2<sup>nd</sup> rejection of claim 1 in the prior Office Action dated March 1, 2006 is removed according to the Applicants' Amendment filed on March 1, 2006.

The rejection of claims 1-9 in the prior Office Action dated November 7, 2005 is sustained.

The new ground of rejection for claims 1-21 is presented together with the original rejections for claims 1-9 in the following paragraphs.

#### *Claim Objections*

(2). **Claim 21** is objected to because of the following informalities: In claim 21, it recites the component (U) and two (C), it would be appropriate to recite component (A), (B), (C), (D). Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

(3). **Claim 19** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 19, it recites the "consisting essentially of" which is not properly described in Specification on page 6 and 7 which recites "comprising". Although "comprising" and "consisting essential of" are open language used in the claims. However, the phrase of "comprising" opens to the inclusion of uncited components which would alter the properties of

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the cited subject matter. But the phrase "consisting essentially of" does not. Therefore, the phrase "consisting essentially of" is new matter for the patentability not supported by instant application.

***Claim Rejections - 35 USC § 102/103***

(4). The text of those Sections of Title 35 U.S. Code not included in this office Action can be found in the prior Office Action date November 7, 2005.

(5). **Claims 1-9** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okada et al (US005093404A) for the same rationale recited in the prior Office Action dated November 7, 2005.

Also,

(6). **Claims 1-21** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kihira et al (US005403887A).

As to the propylene based polymer modified only with a compound containing in the same molecule thereof an ethylenic double bond and a polar group in **independent claims 1 and 10**, Kihira et al (US005403887A) disclose a resin composition comprising component (A) which is a modified polyolefin resin obtained by introducing a group selected from carboxyl group into a crystalline olefin copolymer consisting of at least one of ethylene and alpha-olefins each having 3 to 8 carbon atoms and at least one chain non-conjugated diene (Abstract, line 1-9). Examples of ethylene and alpha-olefins which can be used as a component of the copolymer including propylene, ethylene, 3-methyl-1-butene and the like. These alpha-olefins may be used singly or in combination of two or more compounds (Col. 3, line 6-21).

As to the content of polar group moieties resulting from a compound containing an ethylenic double bond and a polar group from 0.1 to 0.3 mmol/g in **independent claims 1 and 10**, Kihira et al disclose the content of unsaturated carboxylic acids or derivative thereof is preferably 0.1 to 10 by wt (Col. 5, line 28-30).

As to the intrinsic viscosity and content of components in modified propylene based polymer in **independent claims 1 and 10**, and ratio of intrinsic viscosity of modified propylene

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based polymer to intrinsic viscosity of propylene based polymer to be 0.2 or more in **dependent claims 2 and 11**, in view of substantially identical modified propylene based composition, process disclosed by applicant and by Kihira et al, it is the examiner's position to believe that the modified propylene copolymer resin composition of Kihira et al would inherently possess these properties such as intrinsic viscosity, ratio, molecular weight distribution. Since USPTO does not have proper means to conduct the experiments, the burden now is shifted to the applicants to prove otherwise. *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

As to the limitation of **dependent claims 3 and 12**, Kihira et al disclose the carboxyl-modified polyolefin resin is obtained by reacting the crystalline olefin copolymer with an unsaturated carboxylic acid or a derivative thereof (Col. 5, line 10-14).

As to the limitation of **dependent claims 4 and 13**, Kihira et al disclose the method of heating the crystalline olefin copolymer and the modifier both of which coexist in the presence of a radical polymerization catalyst and the like in a melt state (Col. 5, line 38-42). The temperature of radical polymerization is generally within the range of 30 °C to 350 °C (Col. 5, line 59-61).

As to limitation of **dependent claims 5-7, 14-16 and 19**, Kihira et al disclose a resin composition comprising a modified polyolefin resin by introducing carboxyl group into a crystalline olefin copolymer, a saturated polyester resin (Abstract), an inorganic filler such as mica, and various elastomer such as ethylene-propylene (diene) copolymer and the like (Col. 7, line 18, line 26).

As to the alpha-olefin polymer (A) to be a homopolymer with MFR from 0.1 to 200 g/10-min in **dependent claims 8, 17 and 20**, Kihira et al disclose the polyester such as X7G which has melt flow rate within 0.1 to 200 g/10-min (Col. 6, line 65).

As to the limitation of **dependent claims 9, 18 and 21**, Kihira et al disclose a typical example of such methods being the method in which a powdery, granular or fibrous component and, if required, the additional components, are uniformly mixed by an agitator such as Henschel mixer or the like and then melted and kneaded by a monoaxial or multi-axial extruder (Col. 7, line 60-66).

### ***Response to Arguments***

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Applicants argue that the prior art reference of Okada et al (US005093404) do not disclose the temperature for producing the modified polypropylene based polymer to be  $\leq 180^{\circ}\text{C}$  in the Examples. However, Okada et al (US005093404) disclose melt kneaded with free-radical initiator at a temperature of  $150^{\circ}\text{C}$  to  $300^{\circ}\text{C}$  (Col. 8, line 40-41). Disclosed examples and preferred embodiments do not constitute a teaching away from a **broader disclosure or nonpreferred embodiments**. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Ives Wu

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Date: May 12, 2006



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SUPERVISORY PATENT EXAMINER  
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